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“Designs to Improve Airport Safety”

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Summary and Closing Remarks

Drawn from diverse backgrounds (regulatory, design, operational, research), our panel produced several consistent themes:

- Minimize runway crossings
 - All crossings are not created equal (e.g., “hot zones” especially dangerous)
 - End-around taxiways an attractive alternative, but must ensure they don’t create new hazards (e.g., provide visual barriers to avoid confusion)
- Provide better visual cues (in physical environment and via displays)
 - Reduce need for verbal communication (bandwidth already overloaded)
 - Augmentation displays can provide information not available in the world (e.g., wake vortices, cleared routes)
 - Need benefit/cost analysis of whether to place info in cockpit or in environment
- Safety must be evaluated on system level
 - Non-obvious factors must be considered (e.g., wet-lands = birds = hazard)
 - Better (more subtle) safety metrics needed (beyond incursions & overruns)
 - Safety considerations go all the way to the gate (e.g., ramp ops)
 - Improvement projects often create temporary problem areas (e.g., LAX project with impact ongoing ops for ~8 months)